

REMARKS

A. *Status of the Application*

No claims have been canceled, withdrawn or added. Claims 1, 7, 10, and 14-16 have been amended. No new matter has been introduced. Claims 1-18 remain pending.

B. *Claim Amendments*

The claims have been amended in a similar way to point out how a dielectrophoretic force and magnetophoretic may be **balanced** to position constituents of the sample **at characteristic equilibrium positions** within the chamber. Applicant has included the amendments to clarify and emphasize the concept of *balancing* of forces recited in the claims. In a non-limiting example, the specification explains:

Analytes are then subjected to the combined dielectrophoretic and magnetophoretic forces resulting from the electric and magnetic fields. Providing they spend sufficient time within the flow channels, these forces move analytes sufficiently close to **characteristic positions in the carrier medium flow profile stream at which the DEP and MAP forces balance** so that they may be identified, separated, or isolated. Therefore, analytes emerge from the flow channel at positions that depend on their dielectric and magnetic characteristics.

Specification, page 15, lines 22-26 (emphasis added).

The remarks below generally echo those made previously by Applicant in response to the Office Action mailed October 27, 2004. In sum, Applicant demonstrates that the cited art taken alone or in combination does not disclose, teach, or suggest the elements of the pending claims. For example, the cited art does not disclose or suggest at least the requirement of balancing to position constituents at characteristic equilibrium positions. Applicant respectfully submits that all the pending claims are in condition for allowance and requests that the current rejections be withdrawn.

C. Section 102 Rejection

Claims 1-4, 6, 10-13, and 15-18 stand rejected under 35 U.S.C. §102(b) as being allegedly anticipated by W.O. Patent No. 98/10267 to Gert Blankenstein (“Blankenstein”). Applicant respectfully traverses.

Nowhere does Blankenstein disclose or suggest balancing a dielectrophoretic force and magnetic force to position constituents at characteristic equilibrium heights, as recited particularly in each of the rejected independent claims. The Office cites pages 3, 4, and 8-10 of Blankenstein as disclosing “balancing” (*see* Office Action at p. 3), but those pages do not meet the elements of the pending claims. Instead, those pages (and Blankenstein in general) merely recite that particles in a flow channel are “susceptible to the field across the flow channel” and are “**deflected in the direction of the field.**” *See* Blankenstein, p. 3, lines 33-35 (emphasis added).

Deflection in the direction of a field does not amount to a disclosure or suggestion of balancing, much less balancing such that constituents are positioned to characteristic equilibrium heights. Moreover, any argument that balancing would be “inherent” fails legally and factually. A claim is inherently anticipated only if “the missing descriptive material is ‘necessarily present,’ not merely probably or possibly present, in the prior art.” *Trintec Indus., Inc. v. Top-U.S.A. Corp.*, 295 F.3d 1292, 1295 (Fed. Cir., 2002) (citations omitted). Here, balancing is not necessarily present; Blankenstein instead explicitly contemplates an unbalanced deflection of a particle in the direction of a single field.

Because Blankenstein lacks disclosure of explicit elements of the claims, it cannot serve as an anticipatory reference. Applicant respectfully requests the removal of the current §102 rejections.

D. Section 103 Rejection

Claims 5, 7-9, and 14 stand rejected under 35 U.S.C. 103(a) as allegedly being obvious in view of Blankenstein and U.S. Patent 6,109,119 to Jiang *et al.* Applicant respectfully traverses.

Rejected independent claims 7 and 14 have been amended to clarify that forces are balanced to position constituents at characteristic equilibrium positions. As discussed above, Blankenstein does not disclose or suggest at least this feature. Jiang does not cure the

deficiencies of Blankenstein. Jiang discloses that “a sample is introduced downstream with respect to the injection point of a first sample-free carrier. The sample is consequently pushed downstream until it is stopped by an opposing flow. Subjecting the sample to opposing flows focuses the sample.” *See* Jiang, col. 8, lines 42-46. Disclosure of flow-focusing does not amount to a disclosure or suggestion of the recited balancing. Moreover, there is not a need or desire in Jiang to balance any forces to position a sample within the chamber because the sample is focused by the flow of the sample-free carrier.

Because the cited art taken alone or in combination does not teach or suggest explicit elements of the claims, no *prima facie* case of obviousness has been established. Applicant respectfully requests the removal of the current §103 rejections.

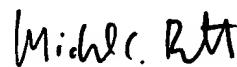
E. Allowable Subject Matter

Applicant appreciates the acknowledgement that claim 13 is allowable. However, in view of the remarks above, it is respectfully believed that all pending claims are in condition for allowance. Applicant requests that the current rejections be withdrawn so that all claims can pass to issuance together.

F. Conclusion

Applicant believes that these remarks fully respond to all outstanding matters for this application. Should the Examiner desire to sustain any rejections, the courtesy of a telephone conference between the Examiner, the Examiner’s supervisor, and the undersigned attorney at 512-536-3018 is respectfully requested in advance.

Respectfully submitted,



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